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REMARKS

Pending Claims

Claims 1-3, 5-7, 20, 26, and 27 have been cancelled without prejudice to filing the subject matter of these claims in one or more subsequent applications or to reintroduction in the present application. In addition, new claims 32-39 have been added which relate to specific embodiments of the present invention and recite specific steric groups, organic ionic groups, and pigment (carbon black). Support for these new claims can be found throughout the present specification and claims as originally filed, including, for example, original claims 2, 8, 9, 20, and 21-29; page 10, lines 7-18; and the Examples. Furthermore, claims 8, 9, 21, and 29, which had depended from claim 1, have been amended to depend from new claim 32. Finally, claim 17 has been amended to provide proper antecedent basis. No new matter has been added. Thus, claims 8-10, 12-19, 21-25, 29, and 32-39 are pending.

Rejection under 35 U.S.C. § 112, First Paragraph

In paragraph 1 of the Final Office Action, the Examiner states that Applicant's argument filed 10/10/06 have been fully considered but are not persuasive, and, as a result, the Examiner has maintained the rejection of claims 1-3, 5-10, 12-27 and 29 due to Applicant's failure to modify the claim language.

In paragraph 3 of the Final Office Action, the Examiner states that, while Applicant argued that the claimed invention is not devoid of synthetic procedures or directional guidance that would enable one skilled in the art to prepare the disclosed pigment products and does provide data essential for how all starting materials can be used, the Examiner states that, on the contrary, the claim encompasses any pigments and organic ionic groups and amphiphilic counterion groups without any final concrete structure. In particular, the Examiner states that the specification provides only 6 particular examples to represent the claimed invention of

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numerous modified pigments, which cannot be representative of the entire modified pigments. The Examiner concludes that the specification has therefore failed to provide sufficient working examples to support the claimed modified pigments and the method of making them.

Applicant continues to strongly disagree. While the examples of the present application describe specific types of pigments and attached groups, one skilled in the art, based on the entire teaching of the specification, including those noted in Applicant's previous response, would readily be able to apply these teachings to a variety of other types of pigments, organic ionic groups, and amphiphilic counterions. The examples are, as described in the present specification, "intended to be purely exemplary" (see page 27, lines 29-30).

However, in order to advance the prosecution of this application, Applicant has cancelled claims 1-3, 5-7, 20, 26, and 27 without prejudice to filing the subject matter of these claims in one or more subsequent applications or to reintroduction in the present application. Thus, the rejection of these claims is moot.

In addition, Applicant has added new claims 32 and 33, which relate to specific embodiments of the present invention, and have amended claims 8, 9, 21, and 29 to depend directly from these new claims. Thus, all of the pending claims depend directly or indirectly from new claims 32 and 33. Each of these new claims recites carbon black as the pigment and also recites specific types of ionic groups and steric groups. Applicant believes that the present specification provides reasonable enablement for the subject matter recited in new claims 32 and 33 and that one skilled in the art would readily be able to make and use the disclosed pigment product without undue experimentation, based on the detailed disclosure of the invention, particularly the examples, which are representative and exemplary of the claimed invention.

Since Applicant believes that the present specification provides ample detailed description and examples to enable the breadth of the present invention as claimed, Applicant respectfully request that the rejection of claims 1-3, 5-10, 12-27, and 29 under 35 U.S.C. § 112, first paragraph be withdrawn.

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Rejection under 35 U.S.C. § 103(a)

In paragraph 2 of the Final Office Action, the Examiner states that Applicant's argument filed 10/10/06 have been fully considered but are not persuasive, and, as a result, the Examiner has maintained the rejection of claims 1, 21-22, and 24-27 for the reasons of record on 4/18/06.

In paragraph 3 of the Final Office Action, the Examiner states that, while Applicant argued that Belmont et al. does not teach two different types of attached groups, such as one steric group and one organic group, and that there is also no showing of an ionic group having an amphiphilic group as claimed, the Examiner states that, contrary to this assertion, the claim encompasses any pigments and organic ionic groups and amphiphilic counterion groups without any final concrete structure. Furthermore, the Examiner states that, since there are no definitive structures for the steric or the organic ionic group with one amphiphilic group in the claims, this means that any form or type is claimed. Regarding Belmont et al., the Examiner states that this reference teaches a pigment such as carbon black having attached at least one organic group substituted with an ionic or ionizable functional group having at least one amphiphilic group, such as a quaternary phosphonium group, and/or a carbon black having attached at least one organic group having one branched C1-C12 alkyl group as the steric group, and that it would seem reasonable that the bulky group, such as an aromatic group with branched alkyl groups, can be used as either the organic group and/or the steric group, depending on the choice of the skilled artisan in the art. The Examiner concludes that it would have been obvious to the skilled artisan, desiring to formulate the pigment containing the one steric group and one organic group with one amphiphilic group, to use the substituted aromatic compound of Belmont et al. as the organic group having the steric groups along with quaternary phosphonium groups. The Examiner notes that this reference is relevant to the claimed compound due to the absence of the finite chemical structure for the pigment product.

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Applicant continues to strongly disagree. In particular, while Belmont et al. discloses a carbon black product having attached at least one organic group comprising at least one ionic group, at least one ionizable group, or a mixture thereof, this would be similar to the "organic ionic group" recited in the present claims. However, there is no disclosure, teaching or suggestion in Belmont et al. that such an organic ionic group can or should be used in combination with a second, different type of group and, in particular, a steric group.

Furthermore, even if, as suggested by the Examiner, one of ordinary skill in the art did consider this type of organic ionic group to also be capable of being a steric group, there is no disclosure, teaching or suggestion in Belmont et al. that this is an ionic group with an amphiphilic counterion, as recited in the present claims. The quaternary phosphonium group of Belmont et al, which was specifically identified by the Examiner, is not an amphiphilic counterion, as defined in the present application (see page 11, lines 7-8). Rather, this is an embodiment of Belmont et al. in which the organic group comprises a cationic group. No amphiphilic counterion is disclosed for any of the organic ionic groups of Belmont et al.

However, in order to advance the prosecution of this application, Applicant has cancelled claims 1, 26, and 27 without prejudice to filing the subject matter of these claims in one or more subsequent applications or to reintroduction in the present application. Thus, the rejection of these claims is moot.

In addition, Applicant has added new claims 32 and 33, which relate to specific embodiments of the present invention, and have amended claim 21 to depend directly from new claim 32. Thus, all of the pending claims depend directly or indirectly from new claims 32 and 33. Each of these new claims recites carbon black as the pigment and also recites specific types of ionic groups and steric groups. As such, Applicant believes these claims are not absent of a finite chemical structure for the pigment product, as stated by the Examiner. Furthermore, Applicant believes that there is no disclosure, teaching, or suggestion in Belmont et al. of these specific pigment products, nor of any inkjet ink compositions or printing plate compositions comprising such pigment products.

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Since Applicant believes that Belmont et al. does not disclose, teach, or suggest a pigment product having two different types of attached groups, and, in particular, the specific organic ionic groups and steric groups recited in the present claims, Applicant therefore believes that the present claims are patentable over Belmont et al. and respectfully request that the rejection of claims 1, 21-22, and 24-27 under 35 U.S.C. § 103(a) be withdrawn.

Conclusions

In view of the foregoing remarks, Applicant believes that this application is in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would further expedite the prosecution of the subject application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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